REMARKS

Status of the Claims

The Final Office Action mailed December 23, 2008 noted that claims 12-22 were pending and rejected claims 12-22. Claims 12-22 are cancelled. New claims 23-32 are added. No new matter is believed to be presented.

Claims 23-32 are pending and under consideration. Reconsideration of the claims is requested. The rejection is respectfully traversed below.

Rejection under 35 U.S.C. § 102

The Office Action, on page 4, in item 2, rejected claims 12-22 under 35 U.S.C. § 102(e) as being anticipated by Bergel (U.S. Patent Application Publication Number 2003/0017835). This rejection is respectfully traversed below. Claims 12-22 have been cancelled, and new claims 23-32 have been added based on claims 12-22. For instance, new independent claim 23 incorporates and clarifies features of claims 12 and 16. New independent claim 31 incorporates and clarifies features of claims 21 and 16, and new independent claim 32 incorporates and clarifies features of claims 22 and 16. New dependent claims 24-30 are based upon the now cancelled dependent claims 13-15 and 17-20.

Bergel discusses a method of reducing fading of a transmission channel when a mobile user unit is moving at relatively higher speeds. Further, Bergel discusses that channel estimation at a mobile station to compensate for multipath fading makes too many assumptions, and estimation of transmission patterns in closed loop transmit diversity modes needs to be more accurate. However, Bergel utilizes **two separate transmission signals** each with a channel estimation term to predict a future state of a channel. (See Bergel, paragraph [0005], [0011], [0026]).

New claim 23 patentably distinguishes over Bergel, because nothing cited or found in Bergel discloses:

> adjusting **a symbol parameter of a first data symbol** to be transmitted from the receiver station to the sending station via a second transmitting channel, the adjusting based on a function of a value of the channel parameter of the first transmitting channel; and
>
> changing **a symbol parameter of a second data symbol** to be transmitted from the receiver station to the sending station by a mathematical operation opposite from adjusting of a the symbol

parameter of the first data symbol.

Both the first and second data symbol as recited in claim 23 convey channel information related to the same channel. However, Bergel merely discusses channel estimation of first and second prediction data for **two different links**, a first transmission channel 32A and a second transmission signal 32B. (See Bergel, paragraph [0026] and Figure 1, Figure 4A, 85 and 87). The first and second data symbol of claim 23 carry channel information for an uplink, and thus can be used for channel information feedback in that one uplink. Both are based on a value of the channel parameter of the **first transmitting channel**. (See Application, Figure 1, D1' and D2'). Bergel is silent regarding two data symbols for a single uplink, and thus claim 23 patentably distinguishes over Bergel.

New claim 31 patentably distinguishes over Bergel, because nothing cited or found in Bergel discloses:

> an adjustment unit changing a symbol parameter of a first data symbol to be transmitted from said receiver station to the sending station via a second transmitting channel, the adjustment unit changing the symbol parameter of the first data symbol based on a function of a value of the channel parameter of the first transmitting channel; and
>
> a changing unit changing a symbol parameter of a second data symbol to be transmitted from the receiver station to the sending station by a mathematical operation opposite to the changing of the first data symbol.

New claim 32 patentably distinguishes over Bergel, because nothing cited or found in Bergel discloses:

> a receiver unit receiving from the receiver station a first data symbol having a first symbol parameter adjusted for communication as a function of a value of a channel parameter of the first transmitting channel and a second data symbol having a second symbol parameter adjusted for communication according to a mathematical operation opposite to the adjusting of the first symbol parameter; and
>
> an ascertainment unit ascertaining the channel parameter based on the first and second data symbol received from the receiver unit.

The dependent claims depend from the above-discussed independent claims and are patentable over the cited references for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the cited references. For example, claim 24 recites "ascertaining at the sending station the channel parameter of the first transmitting channel determined by the receiver station, based on the first and second data

symbol received at the sending station." In particular, the cited references do not teach ascertaining the channel parameter based on the first and second data symbol, both of which carry channel information for the same link. It is submitted that the dependent claims are independently patentable over the cited references.

Summary

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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